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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/938,982	08/24/2001	Ravi Murthy	257/062	3330

23639 7590 03/17/2006  
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EXAMINER

VEILLARD, JACQUES

ART UNIT PAPER NUMBER

2165

DATE MAILED: 03/17/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**SUPPLEMENTAL  
Notice of Allowability**

Application No.

09/938,982

Examiner

Jacques Veillard

Applicant(s)

MURTHY ET AL.

Art Unit

2165

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 12/05/05.
2. ☒ The allowed claim(s) is/are 1-43.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some\* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

- |   |  |
|---|--|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892)  | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)                                  |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                | 6. <input checked="" type="checkbox"/> Interview Summary (PTO-413),<br>Paper No./Mail Date <u>3/6/2006</u> . |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),<br>Paper No./Mail Date _____ | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment  |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit<br>of Biological Material          | 8. <input type="checkbox"/> Examiner's Statement of Reasons for Allowance                                    |
|   | 9. <input type="checkbox"/> Other _____.   |

Art Unit: 2165

## **SUPPLEMENTAL**

### **DETAILED ACTION**

1. This action is responsive to the applicant's amendment filed on 12/5/2005.
2. Claims 1, 32, 33 have been amended, and claims 34-43 have been added.
3. Claims 1-43 are pending and presented for examination.

### ***Information Disclosure Statement***

4. The information disclosure statement (IDS) submitted on December 29, 2005 is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement has been placed in the application file, and has been considered as to the merits.

### **EXAMINER'S AMENDMENT**

5. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Peter C. Mei (Reg. No. 39, 768) on March 6, 2006.

The application has been amended as follows:

#### **In the claims:**

This listing of claims will replace all prior versions, and listings of claims in the application:

33. (Currently Amended) A computer program product comprising a computer

Art Unit: 2165

useable storage medium having executable code to execute a process for pipelining table functions, ~~the~~

~~process-~~ comprising ~~the steps of~~ :

a) executable code for performing a set up operation when the table function is called, the table function being a user-defined function that can produce rows of data and used in selection, iteration, or aggregation database query language statements;

b) executable code for fetching a subset of output data from the table function;

c) executable code for sending the subset of the output data to a first consumer of the output data;

d) executable code for repeating steps b) and c) until all the output data has been fetched from the table function.

34. (Currently Amended) The system of claim 32 further comprising means for a data producer to produce data to be sent to the table function, in which the data producer comprises a second table function.

35. (Currently Amended) The system of claim [[32]] 34 in which the table function executes in the same or in a different execution thread than the data producer.

37. (Currently Amended) The system of claim [[32,]] 34 in which the data producer comprises a dynamically configurable return type.

39. (Currently Amended) The computer program product of claim 33 further comprising

Art Unit: 2165

executable code for a data producer to produce data to be sent to the table function, in which the data producer comprises a second table function.

40. (Currently Amended) The computer program product of claim ~~[[33]]~~ 39 in which the executable code for the table function executes in the same or in a different execution thread than the executable code for the data producer,

41. (Currently Amended) The computer program product of claim 33 further comprising executable code in which a callback function is passed from the table function.

42. (Currently Amended) The computer program product of claim ~~[[33]]~~ 39 in which the executable code for the data producer comprises a dynamically configurable return type.

43. (Currently Amended) The computer program product of claim 33 further comprising executable code in which the subset of the output data is pipelined to a database query language statement.

6. In view of Applicant's amendment and remarks, filed December 5, 2005, Examiner has fully considered the amendment and remarks and believes that they are deemed to be persuasive.

***Allowable Subject Matter***

Art Unit: 2165

7. Claims 1-43 are allowed in light of the applicant's arguments and in light of the prior art made of record.

***Reasons for Indicating Allowable Subject matter***

8. The following is an examiner's statement of reasons for allowance: Applicant(s) particularly disclose a method, a system and a computer program product for pipelining a table function in database system environment. The examiner, upon search a variety of databases, submits respectfully that -- *performing a set up operation when the table function is called, the table function being a user-defined function that produces rows of data and used in selection, iteration, or aggregation database query language statements; fetching a subset of output data from a data producer; sending the subset of the output data to a first consumer of the output data, wherein the first consumer is the table function* -- as embodied in the independent claims 1, 32 and 33, in context with the other limitations of the claims was not described by, would not have been obvious over, nor would have been fairly suggested by the prior art of record.

The dependent claims, being further limiting to the independent claim, definite and fully enabled by the Specification are also allowed.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Art Unit: 2165

*Points Of Contact*

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jacques Veillard whose telephone number is (571) 272-4086. The examiner can normally be reached on Mon. to Fri. from 9 AM to 4:30 PM, alt. Fri. off..

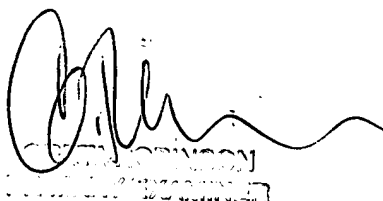
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeffrey Gaffin can be reached on (571) 272- 4146. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

*J.V.*  
*J.V.*

Jacques Veillard  
Patent Examiner TC 2100

March 14, 2006

A handwritten signature in black ink, appearing to read 'J. Veillard', with a stylized flourish at the end. Below the signature is a rectangular stamp with the text 'JACQUES VEILLARD' and 'PATENT EXAMINER'.